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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,491	12/04/2003	Terry Lines	100-14320 (P04927-D01)	3061
33402	7590	03/13/2006	EXAMINER	
LAW OFFICES OF MARK C. PICKERING P.O. BOX 300 PETALUMA, CA 94953			LINDSAY JR, WALTER LEE	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,491

Applicant(s)

LINES, TERRY

Examiner

Walter L. Lindsay, Jr.

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-17 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 18-20 and 24-26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/04/2003.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This Office Action is in response to an Application filed on 5/11/2004.

Currently, claims 15-26 are pending.

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claim 15 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (filed 5/11/2004) .

Applicant's Admitted Prior Art shows the method as claimed in Figs. 1A-1I and corresponding text as: implanting a first dopant into the first region (134) and the second region (132); and implanting a second dopant into the second region (144) and the third region (130) (lines 10-27, page 2) (claim 15). (AAPA) teaches that the first dopant and the second dopant have a same conductivity type (p-type) (lines 10-27, Page 2) (claim 21).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 16, 17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (filed 5/11/2004) in view of Muramoto et al (U.S. Patent No. 6,198,140 dated 3/6/2001).

Applicant's Admitted Prior Art shows the method as substantially claimed and described above.

Additionally, (AAPA) discloses: forming spaced apart first source and drain regions of the second conductivity type in the first region (242); forming spaced apart second source and drain regions of the second conductivity type in the second region (242); and forming spaced apart third source and drain regions of the second conductivity type in the third region (242) (lines 1-5, page 7) (claim 17); wherein the first dopant and the second dopant have a same conductivity type (lines 1-5, page 7) (claim

22); and forming a layer of polysilicon on the layer of second oxide; and etching the layer of polysilicon to form a first gate over the second region and a second gate over the third region, the first gate having a length that is 0.3-0.8 as long as a length of the second gate (lines 14-27, page 6).

Applicant's Admitted Prior Art lacks anticipation only in not explicitly teaching that: 1) a layer is formed of first oxide on the first region; and forming a layer of second oxide region and third region, a thickness of the layer of the first oxide being greater than a thickness of the layer of the second oxide (claim 16).

Muramoto discusses the growth of gate oxides of varying thicknesses. Muramoto shows the growth of oxide films 300, 301 and 302 with oxide 300 being thicker than oxides 301 and 302 (col. 10, line 49- col. 11, line 27). This process of forming multiple thickness of gate oxide layers aid in rapid processing of wafer processes with high yield and less complicated heat histories (col. 2, lines 45-54).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the AAPA by forming oxides of varying levels, as taught by Muramoto, with the motivation that, Muramoto teaches a process of forming multiple thickness of gate oxide layers aid in rapid processing of wafer processes with high yield and less complicated heat histories.

Allowable Subject Matter

7. Claims 18-20 and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter L. Lindsay, Jr. whose telephone number is (571) 272-1674. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Lebentritt can be reached on (571) 272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter L. Lindsay, Jr.
Examiner
Art Unit 2812

WLL

March 4, 2006

